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On Sunstroke, as it occurred in the Army of the Potomac. By CH. SMART, M. D., Asst. Surg. U. S. A., Medical Inspector Second Army Corps.

As the spring of 1863 verged into summer, and rumours of the occurrence of cases of sunstroke pervaded the army, my conscience commenced to prick me on account of my ignorance of the condition so called. I knew nothing of it, had never seen a case, and had no written information concerning it; hence I had recourse to the medical officers in the command for instruction in its pathology and treatment. The result of my inquiries was very unsatisfactory. Some believed the state to be allied to syncope—to be syncope *and something more*; but as they could not definitely state in what this *plus* consisted, a link was wanting in the chain of indications to be fulfilled by treatment. Their dependence lay in removal to the shade, the horizontal position, cold to the head, and a swallow of whiskey. Others were inclined to favour an apoplectic pathology, alleging their belief that in every fatal case a clot would be found, if carefully searched for, in the cerebral textures. These placed the patient in an ambulance, with cold cloths to his head, administering at the same time a couple of cathartic pills; some advocated the use of the lancet, although I have never seen it had recourse to.

A short time ago I chanced to see a paper on this subject, by Dr. R. C. Stiles, Professor of Physiology in Vermont University,¹ formerly of the U. S. Volunteers, and surgeon-in-chief of the First Division, Second Corps, which I read with an interest deepened by the fact that I had had the satisfaction of seeing many of the cases he studied. In this paper he communicates the details of some of the experiments which led him to the conclusion that sunstroke is a *paralysis of the heart*, due to the direct action of heated blood upon its muscular tissue. I do not, however, agree with Dr. Stiles in his conclusions. I do not consider that any results derived from his experiments are admissible as explanatory of the "physiology" of the disease in question, how far soever they may go—and with that, at present, I have nothing to do—to prove that heat, at least heat as applied by him, induces a paralysis in muscular tissue. This opinion I base on the fact that the combination of conditions to the action of which he subjected the various animals experimented on differs materially from the circumstances which in nature conspire to the production of sunstroke; he immersed rats, mice, and kittens in water at 120° Fahr., and held them by the back of the neck so as to permit of respiration, until death supervened. In one case, however, he induced death with all the symptoms of sunstroke by immersing a rabbit in hot air (not over 120° Fahr.); this, although it does not prove *his* point, is interesting in so far as it defines precisely the essential elements in the causation of this disease, limiting them simply to exposure to a hot and dry atmosphere, and relieving the direct solar ray, its chemical and

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luminous constituents, and muscular exertion, from all charge save that of being accessory.

Some writers advocate as the true theory of this disease, a direct influence exercised by heat on the nervous system, which, by altering in some slight degree its chemical constitution, or perhaps only its molecular or physical arrangement, interferes with its normal action, and becomes propagated to the heart and lungs, in which disturbance of function is secondarily induced.

In the October number of this journal for 1863, Dr. H. C. Wood, of Philadelphia, gives a history of nine cases of sunstroke, of which only one recovered. In his remarks upon these, he throws overboard the suppositions that the disease is of inflammatory origin or dependent on nervous exhaustion, and maintains it to be due to a morbid condition of blood. He says: "The true pathology of the disease appears, then, to be as follows: The excessive heat causes a suspension of the functions of the excretory glands, and produces changes in the life-fluid probably more than the simple retention of effete material. These alterations in the blood are trifling at first, but are progressive, so that in a short time some agent or agencies are evolved capable of producing the fearful cerebral symptoms. The name of 'sunstroke' is very indefinite, and if the pathology advocated in this paper is correct, *thermohæmia* or *thermic fever* would be more in accordance with the modern system of nomenclature." But what the nature of the changes may be, he does not discuss. He does not specify the agent or agencies developed in the blood, and hence leaves us in ignorance of the proper means to be adopted to counteract their influence.

Sunstroke (I refer only to what is known in the Army of the Potomac as such) was of very frequent occurrence during the summers of 1863 and 1864, so much so, indeed, that the profession ought, perhaps, to be more intimately acquainted with it than we are. We know it only as a passing acquaintance, by sight. This is mainly attributable to the fact that the affection seldom presents itself while we are lying in camp and can render it some attention, but, instead, forces itself under our observation upon the march, when we have only just time to halt and lodge the patient in an ambulance; or, worse still, while manœuvring in front of the enemy, when the wounded from the skirmish line have more urgent claims to our regard. I regret that I cannot place upon paper any reliable statistics concerning the frequency of the occurrence of sunstroke, nor indicate the temperature of those days most prolific of such cases, nor find a form in which to express the amount of fatigue undergone by the men before succumbing to the stroke. I can only say that during the summer of 1863, spent in marching from the Rappahannock to Gettysburg, and thence to the Rapidan, with an average strength present of about 12,000, fifty-two cases only were recorded; while during the following season, spent in fighting from the Rapidan to and in front of Petersburg, with a mean strength of about 20,000, the number of cases recorded by the regimental surgeons amounted to three hundred and ninety. In the latter year the campaign was more arduous, the season more sultry, and the latitude lower. Many cases transpired, however, that never came under observation at all; those recorded were the graver cases only. Concerning mortality, I have to state that I observed no case of death during the former summer; during the latter I saw seven cases prove fatal. I am not aware that any *post-mortem* examinations have been made in this corps in cases of death from sunstroke.

Symptoms.—The man who is to become the subject of a *coup de soleil*, most likely a raw Irish or German recruit, at first perspires very freely, as

indeed do his veteran comrades, while toiling along under the weight of arms, knapsack, blanket, and rations. The back of his head feels painfully hot, notwithstanding he may have draped it with a silk handkerchief, reversed his cap or filled its crown with leaves, as an infallible protection against the scorching rays. His heart beats violently, and his mind is unpleasantly cognizant of its action. He breathes rapidly, open-mouthed, for there is a slight feeling of weight in his breast, which the hot air he inhales, rendered hotter still by the dense clouds of dust with which it is laden, does not seem to have body enough to uplift. Thirst torments him also, while a crowd of lesser evils contribute to the sum of his discomfort. His eyes smart from the influx of the streams of perspiration, which neither the eyebrows nor the greased margins of the eyelids suffice to turn aside; while the optic nervous masses and the brain as a whole ache with the glare of the sun's reflection. He is very miserable, so much so that his mind is filled with nothing but impressions of his own morbid sensations.

These symptoms grow rapidly more distressing. He halts for a moment, and, notwithstanding the remonstrances of his comrades, takes a long draught of the warm water his canteen contains. He feels the better for it and pushes on with renewed vigour, but by and by relapses into his former state.

Your old soldier, when in this condition, drops out of the column, throws his gun and knapsack on the ground, and stretches himself at full length in the shade of some tree where he lies alternately fanning himself and sipping his stock of water. By the time he has finished his canteen he is quite recovered, and as he has no desire to be challenged by the Division Provost Guard, he immediately buckles to the road, rejoining his command most likely at its next resting place. But your raw material does not attempt this, feeling as he does from home if separated from his regiment, and alone in the world when beyond the limits of his brigade. He staggers onwards, a vague feeling of some impending calamity oppressing his mind. His heart becomes lessened in power, it flutters rather than beats. The perspiration disappears from his skin, but his thirst increases; he makes frequent but futile efforts to spit away the viscid phlegm that sticks to his lips. The aching in his head becomes pain, the oppression in his chest agony. A tremor seizes his limbs, a feeling of sinking takes possession of his heart, and his mind swims into unconsciousness as he falls—sun-struck.

He is insensible. At first, perhaps, he may be able to articulate an indistinct answer to inquiries concerning his name or regiment if asked in a loud sharp tone, but this does not last long; he becomes totally unconscious in a very short time. The pupils may be dilated or contracted. His pulse is quick, compressible and small withal; it even intermits occasionally. His breathing is hurried, short shallow respirations, interrupted now and again by a long deep-drawn sigh. His skin is hot and dry, and his lips livid. He clutches nervously (and this is a measure as well of his insensibility as of his præcordial distress) at his chest with a force oftentimes sufficient, if the surface be exposed, to lacerate the skin. If no one be present to have recourse, either knowingly or unwittingly, to the means calculated to obviate the abnormal condition and promote a speedy return to consciousness and ease, the man will assuredly die, unless, indeed, nature should interfere, as she sometimes does, and by the bursting of a thunder-storm effect a cure. The power of deglutition becomes lost as his insen-

sibility deepens. His pulse flickers faintly, until, with a sigh, broken perhaps by the death-rattle in his throat, he expires.

But very frequently to these symptoms is superadded one which gives the disease to the onlooker a very fearful aspect. I refer to the occurrence of tetanic convulsions. The intermissions last for two or three minutes or longer, the paroxysms from ten to thirty seconds. As the fit comes on the breathing becomes more rapid and shallow, the limbs writhe and the nervous twitchings of the fingers, as they tear at the præcordia, are very marked. Violent contractions of the muscles speedily ensue, stretching the body out perfectly straight, or, more commonly, with the head thrown back and the abdomen raised from the more powerful action of the extensor muscles. This condition continues but a few seconds in all its intensity; the spasm then relaxes and seems about to disappear, when, after one or two hesitating twitches, the muscles again start into rigid prominence. This may be repeated several times before the fit comes to a conclusion. While the body is thus bent in rigid spasm the breathing is suspended and the lividity of the lips increases. The termination of the fit is marked by a long sighing expiration, which is less noticeable the nearer the case approaches its fatal end. Death, when it does occur in these cases, usually takes place during the continuance of a convulsive seizure.

Pathology.—Heat relaxes warm-blooded animals. Blood is accumulated in their superficial vessels, and from them its water is rapidly but insensibly vapourized, or gathers in big dew-drops upon the skin. Now water is of as much importance in the constitution of the blood as are the red corpuscles themselves, for although the immediate purpose it fulfils in the economy is simply a mechanical one, yet, to the proper conduction of the chemico-vital processes in which the disks are concerned, *its* presence in normal quantity is indispensable. Deprive a man of half the water his blood contains and the consequences will be as apparent as if in the loss the blood-cells had been implicated also; the difference exists only in the facility with which in the one case the loss can be repaired. The alteration in the physical properties of the blood consequent upon this evaporation of its water, and concomitant changes in the bloodvessels themselves tend to produce retardation of the flow and depression of the vital powers.

The viscosity of the now concentrated serum, the aggregative tendencies of the closely-crowded corpuscles, and the relaxation or loss of tone (Dr. Stiles would call it incipient paralysis from heat) of the vessels, all combine to prevent the circulation of life's current with a rapidity adequate to the preservation of the functions at a healthy standard. But another and more potent influence productive of evil arises from the effects on the circulation of the alteration in the blood-cells, which the mutual action transpiring between themselves and the unnaturally dense medium in which they float, produces. Exosmosis drains the disks of their contents, corrugates them, and renders them incompetent to discharge, with an efficiency necessary and natural, the important duties assigned them in the system. In consequence of this the blood flows slowly and more slowly through the pulmonary capillaries, in which it finds difficulty in becoming disburthened of the poison it has gathered up while traversing the systemic circle. Congestion soon ensues, and in addition to the morbid conditions already enumerated as affecting the blood, we find it becoming more and more deteriorated by non-aeration.

The effects of this alteration in the bulk, rapidity of circulation, and constitution of the vital fluid are first manifested upon the brain, being

evidenced by the signs of depressed nervous energy we observe—the aching and incapacity for mental exertion which we observe in the first instance, and the giddiness and insensibility which so soon supervene. The staggering gait and tremors are manifestly results of the impaired nutrition and deficient innervation of the muscular system; while the convulsions, which in many cases are so frequent, may be referred to the removal of the restraining influence exerted by the brain over the reflex function of the medulla spinalis. The condition of the pulmonary vessels and of the blood contained in them, as perhaps also, sympathetically, the unoxygenated state of the tissues traversed by the systemic supply tubes, furnish an explanation of the præcordial oppression which is always so mutely but distressingly complained of. Spasm of the diaphragm, during a convulsive paroxysm, may perhaps increase its intensity. The heart, influenced by the same causes—the state of the nervous system, and the slow transmission of an altered blood through its proper vessels—loses power, but, by increased frequency of action, it endeavours to overcome the obstacles to free circulation and to supply its own and the system's necessities.

If this be the true light in which to view the pathology of sunstroke, it defines the disease as a condition resulting from the concentration of the serum of the blood.

Bodily exercise produces heat. Bodily exercise, also, when carried to excess, in a dry atmosphere, and when at the same time the individual is deprived of water, produces symptoms of depression similar to those above mentioned, and dependent upon the same cause, for heat, whether derived from some source foreign to the body or generated within the system, gives origin to evaporation from the cutaneous or pulmonary tracts, concentration of the serum, and if this could be carried to the requisite extent, would lead to a *coup de soleil*. When physical exertion, then, is added to exposure to external heat, the morbid condition becomes more speedily developed, since both causes combine to produce but one effect. The exercise, however, is by no means to be considered as an essential, if Dr. Stiles' experiment be allowed any weight; and, besides, I can instance cases where it, from the insignificance of its amount, could have exerted but a small share of influence in bringing about the disease. I have seen officers struck while riding at a gentle walk in the marching column. Two cases of death occurred in the command during one sultry day in the beginning of July of last year; in the one case, the man, a convalescent from some northern hospital, had walked from City Point to Petersburg before he was struck; in the other, without any previous exertion on the part of the soldier, the stroke occurred while he lay oppressed with heat under the shade of his shelter-tent.

It is interesting to remark that the depression which is induced exerts a conservative influence over the system, diminishing as it does, in some measure, the activity of the cause, which by its continued action leads to insensibility and death. Farther physical and mental exertion is rendered impossible; the rapidity with which the chemical changes which take place in the systemic capillaries are accomplished is materially lessened, and the evolution of heat by the system (and hence evaporation) is correspondingly diminished. Nature, as it were, feels the losses already entailed upon the water of the blood, and tries to reduce to a minimum the further calls to be made upon it, by lessening the amount of heat generated within the body.

Treatment.—If what I have written above embodies a view in the main correct of the pathology of sunstroke, it is needless for me to occupy time

in enlarging upon its rational treatment. The indications to be fulfilled in order to prevent the occurrence of the stroke if it be but threatened, or to treat it if it has already occurred, are in the one case to preserve the blood in, and in the other to restore it to, its natural condition; and the means in both cases is the same—*water*.

I have often wondered how it came to pass that the medical officers of the Army of the Potomac should caution their men to avoid drinking much water on a hot day's march. From an idea that dangerous symptoms have been known to have been a consequence of the practice, and knowing that a sharp bellyache is a frequent result, they instruct their men to be chary of drinking—to stint themselves rather than become victims to the effects of over indulgence. So firmly have these teachings settled on the minds of the men, harmonizing as they do with the vague impressions on the subject they brought with them into the army, and very likely with their own experience on the march, that they have fallen into the opposite extreme. Every soldier believes that the more he thirsts, the less he ought to drink, for the greater is the danger in drinking. Thirst is an indication of a want in the system—an uneasy feeling with which nature harasses us when we stand in need of water, lest unwittingly we might do ourselves an injury, not knowing when to drink. It is a beacon lighting us to the well, and not, as regarded by most of our troops, an infallible danger-signal, warning them from its brink.

Troops upon the march should not be sparing of water, if it is to be had. They ought to drink freely; but yet they should not—as they are very apt to do when they can withstand their thirst no longer—empty their canteen before taking it from their parched lips. How great soever the want of water in the blood may be, thrown thus into the stomach it does harm. The loss which the blood suffers is gradually effected, and in like manner absorption to repair that loss requires time for its accomplishment. Water cannot find its way as rapidly from the stomach to the veins as from the canteen to the stomach; so that when this organ is thus distended it must necessarily remain so for some time, giving rise to very distressing symptoms from, if the water be cold, the sudden chilling of its tissues—from the distension of its walls, from the weight, and consequent straining of all the structures suspending and retaining it in its position, and from the sympathetically affected nervous system. The sharp, dragging pain at the epigastrium, the faintness, tendency to vomiting and severe prostration—which by the way often lead the careless to look upon the case as one of sunstroke—are the manifestations of these conditions. Water, then, should not be thus recklessly poured down. On the contrary, it should be swallowed in, I will not say small doses, but in doses not too large, and these should be so frequently repeated as to enable the blood to maintain its normal density, notwithstanding the drain upon it set up by nature with the view of regulating the temperature.

During the course of my service with this corps, I have viewed all the cases of sunstroke I have met, with a few exceptions at the commencement of my experience of the disease, as originating and progressing in the manner I have indicated, and have treated them in accordance with that view. Certainly, if the effects of treatment are admissible as evidence either for or against the correctness of a theory of disease, the result in my experience of replenishing the vessels with water would afford powerful testimony in favour of the supposition that the symptoms are dependent upon nothing but the lack of water in the system. Pursuing this plan of treat-

ment, I have been uniformly successful. I have lost no patients yet; death occurred in the cases which at the commencement of this article I mentioned as having been fatal, either immediately before or immediately after I reached the spot where they lay. So confident, indeed, did success latterly make me, that in every case I felt justified in prognosing that if the patient lived but a few minutes, that is, time sufficient to admit of the absorption of a material amount of water by the veins, he would ultimately recover. I came to feel no discouragement even in the presence of the most formidable looking case, satisfied that I possessed the wherewith to conquer, provided time was afforded me to make use of it.

On finding a soldier sunstruck by the roadside, my first care has been to determine the amount of insensibility, by asking him in a sharp tone the number of his regiment. If he attempted to articulate or showed in any manner that my question had made an impression on his mind, I immediately placed the canteen to his lips and permitted him to swallow four or five ounces of water, repeating the quantity after two or three minutes, having in the interval had him transported to the nearest shade. If, however, his insensibility happened to be more perfect, I proceeded with more caution, placing only a few drops in his mouth to learn the extent of the interference with the power of deglutition.

The first case of a serious nature that I was called upon to treat showed, I think, very markedly the effects of the water cure. From the fact of its being my first case of such a character, all its details have lived in my memory with a clearness and depth of tracing far greater than have the particulars of individual cases occurring subsequently. It was one of the many that happened on the forenoon of Sept. 12th, 1863, when the Corps was marching from Morrisville to Rappahannock Station, Va. I was riding forward to overtake my command, from which I had been separated for an hour or two by some duty, and when I was about half a mile from the tail of the column I found a man in the sun by the roadside, in convulsions, with a small circle of men belonging to the provost guard around him. He was comatose; his skin was very hot and dry; his lips livid; his left pupil dilated somewhat, and his pulse, from its smallness, softness, and rapidity could not be counted. The convulsions were frequent and so violent that I expected each succeeding paroxysm would terminate life. He had been in this condition for about ten minutes; the fits, according to the statements of the men around, having during that time been steadily increasing in frequency, intensity, and duration. A medical officer had seen him immediately after he had been struck down. He could not be said to have treated him, having simply attempted to pour whiskey into his stomach, failing in which he had galloped off to order an ambulance to the spot, leaving instructions that cold cloths should be kept to the patient's head. A man had gone in search of water, but had not returned.

I had the patient carried to a house situated about a hundred yards from the road. I laid him down in its shade, and having obtained water placed a few drops in his mouth, but no attempt was made to swallow, and some trickling into the larynx, a convulsion more severe than any hitherto affecting him was induced. Thereupon I matted his hair with water, and poured it freely over his body, thoroughly saturating the woollen shirt he wore. By this several beneficial results were effected. The overheated body was cooled by the direct contact of the water, and by the evaporation set up from the surface. All farther loss from the serum of the blood was prevented, and an opposite process, that of absorption by the venous

radicles, was instituted. I could do nothing more but await the issue with patience. I conceived that if I had had facilities for *immersing my patient in a tepid bath* his chance of recovery would have been immensely increased.

Presently I thought that his spasms recurred less frequently and diminished in intensity; his pulse certainly altered for the better, and his breathing seemed to improve, notwithstanding that his hand tore at his chest with greater violence. As I continued sprinkling water over him a few drops fell upon his lips; his tongue instantly protruded itself and gathered them up. I dropped some more intentionally upon them with a like result. He was improving. At the end of the next paroxysm, which was a slight one, I raised his head and he drank greedily, uplifting his eyelids as I placed him back upon his pillow, but no gleam of intelligence was yet apparent in his look. In ten minutes more, having drank several times during that period, and objected by a motion of his head when I held a cup containing whiskey to his lips, he was recovered. Very much exhausted he was, it is true, but his pulse and breathing were regular, and his sensibility and consciousness had returned, and although occasionally his fingers would twitch as they had previously done when a convulsion was about to seize him, such movements were not now followed by the general spasm. To prevent any evil effects that might arise from the continued application of the water to his body, I directed his wet underclothing to be removed, the surface rubbed dry, and a clean shirt which his knapsack furnished to be put upon him. His canteen was then filled with water and his blanket wrapped around him before he was transferred to the ambulance.

Here I cannot refrain from quoting the concluding paragraph of Dr. Wood's article: "The treatment of the fully developed disease has been in our hands utterly futile. The case that did recover would have done so if nature had been left to herself; in all the others the condition of the blood, when brought in, precluded all hope. I know of no agents that will check directly the tendency to degradation of the life-fluid. The regular treatment in this hospital is to give a turpentine injection and administer stimulants; both of which are in most cases of no avail. The indications are, first, to check the changes in the blood, and secondly, support the system. But unless the first can be fulfilled, the second is useless. Dr. Taylor (*loc. cit.*) states, that he did not lose a case during April, 1852, when many were stricken down with well-marked symptoms, and when he practised cold affusions, water being poured on them continuously until they showed signs of returning consciousness. This result is so wonderful as to make one doubt whether there is not some difference in the disease as seen in the East Indies and in this country. But the plan certainly ought to be tried, as it may possibly check chemical change by reducing the temperature, and at the worst can only be equally hopeless with all the others."

Sequelæ.—Sometimes, as in such serious cases where the patient has been for a long period insensible, tetanic or epileptiform convulsions, more or less severe, will persist in attacking him now and again, for many hours after his return to sensibility. This, I consider, is dependent upon the disturbance of the nervous function caused by the changes that have taken place in the brain, from non-nutrition and non-removal of effete or used-up particles of its tissue, during the comparatively long period it has suffered from the impaired flow and altered constitution of the blood. To treat these, of which I have seen but two well-marked cases, I have given whis-

key and large doses of morphia, the former to supply the lack of the *vis nervosa*, and by increasing the rapidity of the circulation, to promote a renovation of the cerebral substance, until the latter, the morphia, shall have induced a sleep which effects that renovation more effectually.

While referring to the sequelæ of coup de soleil, I may mention a case which occurred on the 15th of June, 1863, in the person of a corporal of the 63d N. Y. Vols. The man had been drinking very freely for two or three days previous to the attack, as the regiment had received pay, and sutlers in those days did a thriving business in liquor under the rose. For some time after his insensibility and convulsions were removed he lay exhausted and speechless, but as his recovery progressed a new symptom or sets of symptoms developed themselves. He presented the appearance of one labouring under delirium tremens. When I visited him, he talked to me very volubly concerning some rebel sharpshooters that were endeavouring to pick him off, mentioning that one of them had already lodged a ball in his brain, which, he casually remarked, he would report to-morrow at sick call to have me cut out. He eyed me askance and suspiciously during all his talk, and moved off a step or two in alarm when I proffered immediate surgical assistance.

Excessive mental action, whether caused by protracted anxiety, continued voluntary labour of the mind, or the use in large quantity of spirituous liquors, is followed by a depression of the energies, but the blood question, as considered above with reference to sunstroke, does not enter into the pathology of the state. Here, we have the depression of the nervous powers a consequence of previous excitation, not of impeded circulation. The difference in the cause explains what of difference there may be in the manifestation. In the one case we have the supply of blood gradually cut off from a previously healthy brain and insensibility as a consequence; in the other we have a mind exhausted from previous overaction, but with a comparatively normal supply of blood, which enables it to act as perfectly as its own condition will permit. There is no insensibility, but there *is* some alteration from the normal manifestation of mind, usually what we understand by nervous irritability. If now these two conditions should coexist, impeded flow, etc., and irritability from some primary excitement, as when an individual suffering from delirium tremens is exposed to a dry hot atmosphere during perhaps more or less of bodily exercise, we shall have produced a condition of system of a much more serious nature than that arising from either of the causes singly. The symptoms we would expect to meet in such a case are just such as I observed in the case referred to above; an insensibility more or less profound, since the loss of consciousness caused by a deficiency of healthy blood prevents the exhibition of the irritability of delirium, and a more or less complete loss of speech necessarily marking its loquacity, for independent of the interference with the working of the organ of voice, the elementary faculties of sensation and conception of ideas which in delirium are exalted here become lost. But this insensibility speedily running off after the replenishment of the vessels, the brain, which has not yet recovered from its depression, but instead has perhaps sunk lower into that state from the temporary interference with its nutrition, is permitted to act in the irregular manner characteristic of the condition. Treated with whiskey and morphia he ultimately slept, and awoke, after a few hours, with a sound mind in a sound body.

Near Petersburg, Va., March 15, 1865.